

CLAIMS

1. A method for pre-loading information content to caches for information appliances,
comprising:
 - accessing information content with a first appliance;
 - transmitting a request to pre-load the information content into a cache for use by a
 - 5 second appliance associated with an event; and
 - accessing the information content at the second appliance.
2. The method of claim 1, further comprising:
 - viewing a schedule of at least one event stored in a user calendar program.
3. The method of claim 1, further comprising:
 - transmitting a request to delete a previous request to pre-load the information
 - content into a cache for use by the second appliance associated with the event.
4. The method of claim 3, wherein the transmitting step is accomplished using at least one
of the following:
 - the user calendar program;
 - the first appliance; and
 - a user interface maintained by an organization associated with the event.
5. The method of claim 1, wherein the event is an airline flight.
6. The method of claim 1, wherein the transmitting step is accomplished using at least one
of the following:
 - 20 the user calendar program;
 - the first appliance; and
 - a user interface maintained by an organization associated with an event.
7. A method for facilitating pre-loading information content to caches for information
25 appliances, comprising:
 - creating a new scheduled pre-loading upon instruction by a user; and
 - storing information concerning at least one event associated with the scheduled
 - pre-loading, wherein the information comprises at least one of:

the location of the event;
the type of the event; and
the date and time when the event takes place.

8. The method according to claim 7, further comprising:

5 deleting an existing scheduled pre-loading upon instruction by the user.

9. The method of claim 8, wherein the deleting step further comprises:

receiving a request to delete a scheduled pre-loading, wherein the request is
associated with an event;

10 retrieving a network address of a proxy server and a transaction identifier unique
to the scheduled pre-loading;

transmitting a request to delete the scheduled pre-loading to the proxy server,
wherein the request contains the transaction identifier; and

deleting the network address of the proxy server and the transaction identifier.

10. The method of claim 9, further comprising:

15 retrieving a network address of a temporary proxy server if the destination
associated with the event was not specified when the pre-loading was scheduled.

11. The method of claim 7, wherein the creating step further comprises:

receiving a request to create a scheduled pre-loading, wherein the request is
associated with an event;

20 receiving a network address of the information content from a first information
appliance;

receiving a network address of a proxy server, wherein the proxy server contains a
cache associated with a second information appliance associated with the event;

transmitting a request to pre-load the information content to the proxy server;

25 receiving an acknowledging message from the proxy server, wherein the message
contains a transaction identifier unique to the request; and

storing the network address of the proxy server and the transaction identifier in
association with the event.

12. The method of claim 11, further comprising:

receiving a network address of a temporary proxy server if the destination associated with the event has not yet been specified.

13. The method of claim 11, wherein a storage means for a plurality of proxy directories contains a plurality of proxy addresses associated with a plurality of locations where the pre-loaded information content can be used.

14. The method of claim 13, wherein the plurality of locations where the pre-loaded information content can be used comprises at least one of the following:

- an aircraft;
- a hotel;
- a rental car;
- a location within a university;
- an internet service provider; and
- an automobile.

15. The method of claim 14, wherein the proxy directory for the aircraft comprises:
name of an airline;
a flight number;
a departure date and time associated with the flight number; and
the associated proxy address.

16. The method of claim 14, wherein the proxy directory for the hotel comprises:
name of a hotel;
an identifier uniquely associated with a reservation made by a user; and
the associated proxy address.

17. The method of claim 14, wherein the proxy directory for the rental car comprises:
an identifier uniquely associated with a reservation for the rental car made by a user; and
the associated proxy address.

18. The method of claim 14, wherein the proxy directory for the location within a university comprises:
a name of a university;

a name of a building within the university;
a room number within the building; and
the associated proxy address.

19. The method of claim 14, wherein the proxy directory for the internet service provider
5 comprises:

an indicator identifying the user subscribed to the internet service provider; and
the associated proxy address.

20. The method of claim 14, wherein the proxy directory for the automobile comprises:
an identifier uniquely associated with the automobile; and
the associated proxy address.

21. A method for facilitating pre-loading information content to caches for information
appliances, comprising:

processing a request to create a new scheduled pre-loading; and
executing one or more pre-loadings according to a scheduled table.

22. The method according to claim 21, further comprising:
processing a request to delete an existing scheduled pre-loading;

23. The method according to claim 22, wherein processing the request to delete a pre-loading
further comprises:

20 receiving a request to delete a pre-loading, the request containing a unique
identifier associated with the pre-loading;
reading the scheduled table to identify entry with matching unique identifier;
delete the identified entry from the scheduled table; and
transmitting an acknowledgement to the requestor.

25 24. The method according to claim 21, wherein processing the request to create a pre-loading
further comprises:

receiving a request to create a pre-loading;
generating a unique identifier associated with the request for pre-loading;
adding the request to the scheduled table; and

transmitting the unique identifier associated with the request for pre-loading and a proxy address where the pre-loading takes place to the requestor.

25. The method according to claim 21, wherein the scheduled table comprises:

- a unique identifier associated with the pre-loading;
- an indicator identifying the user who made the request for the pre-loading;
- an address of the information content;
- a starting position for pre-loading in the information content;
- the time duration for the information content to be pre-loaded; and
- an indication for a status of pre-loading, comprising at least one of the following

indicators:

- pre-loading not started;
- pre-loading in progress; and
- pre-loading completed.

26. The method according to claim 21, wherein executing one or more pre-loadings according to a scheduled table comprises:

- idling for a predetermined amount of time;
- setting a counter to equal to number of entries in the scheduled table;
- reading an entry in the scheduled table at a position equal to the counter; and
- reading the indication for status of pre-loading.

27. The method according to claim 26, wherein if the indication shows that pre-loading has not started, executing one or more pre-loadings according to a scheduled table further comprises:

- reading the time duration for the information content to be pre-loaded to determine that it is after the current time;
- pre-loading the information content;
- setting the indication for status of pre-loading to pre-load completed;
- decrementing the counter;
- reading the counter, wherein if the counter reads less than zero, then returning to idle for a predetermined period of time, and if the counter does not read less than zero, then returning to reading an entry in the scheduled table at a position equal to the counter.

28. The method of claim 27, wherein if the time duration for the information content to be pre-loaded is determined to be after the current time, then immediately decrement the counter.

29. The method of claim 21, further comprising a method for generating financial charges for pre-loading information content, comprising:

5 monitoring activities of a plurality of proxy servers; and
 generating billing to a user depending on the activities.

30. A system for pre-loading information content to caches for information appliances, comprising:

 a plurality of information appliances;
 a user interface capable of receiving and requesting information content pre-

loading;

 a network access node containing a plurality of proxy servers with a plurality of caches, wherein the plurality of proxy servers are capable of processing requests to pre-load information content into the plurality of caches, said request received from the user interface;

 a storage means for storing information content to be used by the plurality of information appliances;

 a storage means for storing a plurality of network addresses associated with the plurality of proxy servers, each network address also associated with a location of an information appliance; and

20 a billing means capable of monitoring the proxy server and generating billing to a user.

31. A method for pre-loading information content to caches for information appliances, comprising:

25 accessing information content with a first appliance;

 viewing a scheduled of at least one event stored in a user calendar program;

 transmitting a request to pre-load the information content into a cache for use by a second appliance associated with an event; and

 accessing the information content at the second appliance.

32. The method of claim 31, further comprising:

transmitting a request to delete a previous request to pre-load the information content into a cache for use by the second appliance associated with the event.

33. The method of claim 32, wherein the transmitting step is accomplished using at least one of the following:

the user calendar program;

the first appliance; and

a user interface maintained by an organization associated with the event.

34. The method of claim 31, wherein the event is an airline flight.

35. The method of claim 31, wherein the transmitting step is accomplished using at least one of the following:

the user calendar program;

the first appliance; and

a user interface maintained by an organization associated with an event.

36. A method for facilitating pre-loading information content to caches for information appliances, comprising:

creating a new scheduled pre-loading if instructed by a user, wherein the creating step comprises:

receiving a request to create a scheduled pre-loading, wherein the request is associated with an event;

receiving a network address of the information content from a first information appliance;

receiving a network address of a proxy server, wherein the proxy server contains a cache associated with a second information appliance associated with the event;

transmitting a request to pre-load the information content to the proxy server;

receiving an acknowledging message from the proxy server, wherein the message contains a transaction identifier unique to the request; and

storing the network address of the proxy server and the transaction identifier in association with the event.

37. The method according to claim 36, further comprising:

deleting an existing scheduled pre-loading if instructed by the user, wherein the deleting step comprises:

receiving a request to delete a scheduled pre-loading, wherein the request is associated with an event;

retrieving a network address of a proxy server and a transaction identifier unique to the scheduled pre-loading;

transmitting a request to delete the scheduled pre-loading to the proxy server, wherein the request contains the transaction identifier; and

deleting the network address of the proxy server and the transaction identifier.

38. The method of claim 37, wherein the deleting step further comprises:

retrieving a network address of a temporary proxy server if the destination associated with the event was not specified when the pre-loading was scheduled.

39. The method according to claim 36, further comprising:

storing information concerning at least one event associated with the scheduled pre-loading, wherein the information comprises at least one of:

the location of the event;

the type of the event; and

the date and time when the event takes place.

40. The method of claim 36, wherein the creating step further comprises:

receiving a network address of a temporary proxy server if the destination associated with the event has not yet been specified.

41. The method of claim 36, wherein a storage means for a plurality of proxy directories contains a plurality of proxy addresses associated with a plurality of locations where the pre-loaded information content can be used.

42. The method of claim 41, wherein the plurality of locations where the pre-loaded

information content can be used comprises at least one of the following:

- an aircraft;
- a hotel;
- a rental car;
- a location within a university;
- an internet service provider; and
- an automobile.

43. The method of claim 42, wherein the proxy directory for the aircraft comprises:

- name of an airline;
- a flight number;
- a departure date and time associated with the flight number; and
- the associated proxy address.

44. The method of claim 42, wherein the proxy directory for the hotel comprises:

- name of a hotel;
- an identifier uniquely associated with a reservation made by a user; and
- the associated proxy address.

45. The method of claim 42, wherein the proxy directory for the rental car comprises:

- an identifier uniquely associated with a reservation for the rental car made by a user; and
- the associated proxy address.

46. The method of claim 42, wherein the proxy directory for the location within an university comprises:

- name of an university;
- name of an building within the university;
- a room number within the building; and
- the associated proxy address.

47. The method of claim 42, wherein the proxy directory for the internet service provider comprises:

- an indicator identifying that the user is a subscriber of the internet service

provider; and

the associated proxy address.

48. The method of claim 42, wherein the proxy directory for the automobile comprises:
an identifier uniquely associated with the automobile; and
the associated proxy address.

49. A method for facilitating pre-loading information content to caches for information appliances, comprising:

processing a request to create a new scheduled pre-loading, comprising:

receiving a request to create a pre-loading;
generating a unique identifier associated with the request for pre-loading;
adding the request to the scheduled table; and
transmitting the unique identifier associated with the request for pre-

loading and a proxy address where the pre-loading takes place to the requestor.

50. The method according to claim 49, further comprising:

processing a request to delete an existing scheduled pre-loading, comprising:

receiving a request to delete a pre-loading, the request containing a unique identifier associated with the pre-loading;
reading the scheduled table to identify entry with matching unique identifier;

delete the identified entry from the scheduled table; and

transmitting an acknowledgement to the requestor; and

executing one or more pre-loads according to a scheduled table.

51. The method according to claim 49, wherein the scheduled table comprises:

an unique identifier associated with the pre-loading;
an indicator identifying the user who made the request for the pre-loading;
an address of the information content;
a starting position for pre-loading in the information content;
the time duration for the information content to be pre-loaded; and

an indication for status of pre-loading, comprising at least one of the following indicators:

- pre-loading not started;
- pre-loading in progress; and
- pre-loading completed.

52. The method according to claim 49, wherein executing one or more pre-loads according to a scheduled table comprises:

- idling for a predetermined amount of time;
- setting a counter to equal to number of entries in the scheduled table;
- reading an entry in the scheduled table at a position equal to the counter; and
- reading the indication for status of pre-loading.

53. The method according to claim 52, wherein if the indication shows that pre-loading has not started, executing one or more pre-loadings according to a scheduled table further comprises:

- reading the time duration for the information content to be pre-loaded to determine that it is after the current time;
- pre-loading the information content;
- setting the indication for status of pre-loading to pre-load completed;
- decrementing the counter;
- reading the counter, wherein if the counter reads less than zero, then returning to idle for a predetermined period of time, and if the counter does not read less than zero, then returning to reading an entry in the scheduled table at a position equal to the counter.

54. The method of claim 53, wherein if the time duration for the information content to be pre-loaded is determined to be after the current time, then immediately decrement the counter.